UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,929	12/10/2003	Kang Soo Seo	46500-000569/US	6314

30593 7590 09/16/2009

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 8910
RESTON, VA 20195

EXAMINER	
HILLERY, NATHAN	
ART UNIT	PAPER NUMBER
2176	

MAIL DATE	DELIVERY MODE
09/16/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/730,929	SEO ET AL.	
	Examiner	Art Unit	
	NATHAN HILLERY	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 June 2009*.

2a)☒ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *39,42-45 and 57-69* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *39,42-45 and 57-69* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/30/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Amendment filed on 6/9/09.

2. Claims 39 – 56 are pending in the case. Claims 39 – 45 are elected for examination at this time. Claim 39 is independent.

Information Disclosure Statement

3. The information disclosure statement filed 3/30/09 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent or other information listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 39, 57, 61 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukagoshi et al. (US 5848217 A) and further in view of Crinon et al. (US 7174560 B1).

6. **Regarding independent claims 39 and 57,**

Tsukagoshi et al. teach that **reading text-based data including the presentation time stamp (PTS) from a recording medium** (Column 5, lines 49 – 67).

Tsukagoshi et al. teach that **displaying the text-based data synchronized with the video data using the presentation time stamp (PTS) of the video data and text data read from the recording medium** (Column 8, lines 49 – 65).

Tsukagoshi et al. do not explicitly teach **reading video data including presentation time stamp (PTS) and program clock reference (PCR) from a recording medium**; and that **the text-based data not including the program clock reference (PCR)**.

Crinon et al. teach that **reading video data including presentation time stamp (PTS) and program clock reference (PCR) from a recording medium** (Column 8, lines 10 – 30) and that **the text-based data not including the program clock reference (PCR)** (Column 7, line 63 – Column 8, line 9),

Because both Tsukagoshi et al. and Crinon e t al. teach methods of synchronizing data, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute one known element and/or method for the other to achieve the predictable result of utilizing a PCR as oppose to an SCR.

7. **Regarding independent claims 61 and 66**,

Tsukagoshi et al. teach that **recording video data including presentation time stamp (PTS) and program clock reference (PCR) and text-based data including the presentation time stamp (PTS)** (Column 14, line 59 – Column 15, line 13).

Tsukagoshi et al. teach that **recording the text-based data synchronized with the video data using the presentation time stamp (PTS) of the video data and text data** (Column 8, lines 49 – 65).

Tsukagoshi et al. do not explicitly teach **recording video data including presentation time stamp (PTS) and program clock reference (PCR)**; and that **the text-based data not including the program clock reference (PCR)**.

Crinon et al. teach that **recording video data including presentation time stamp (PTS) and program clock reference (PCR)** (Column 8, lines 10 – 30) and that **the text-based data not including the program clock reference (PCR)** (Column 7, line 63 – Column 8, line 9),

Because both Tsukagoshi et al. and Crinon e t al. teach methods of synchronizing data, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute one known element and/or method for the other to achieve the predictable result of utilizing a PCR as oppose to an SCR.

8. Claims 42 – 45, 58 – 60, 62 – 65 and 67 – 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukagoshi et al. (US 5848217 A) and Crinon et al. (US 7174560 B1) as applied to claims 39, 57, 61 and 66 and further in view of Jung et al. (US 20040081434 A1).

9. **Regarding dependent claim 42**, Tsukagoshi et al. and Crinon et al. do not explicitly teach **wherein the text-based data is subtitle data written in a mark-up language**.

Jung et al. teach that referring to FIG. 11, a markup language is used as text data for subtitles (paragraph block 0116), which meet the limitation of **wherein the text-based data is subtitle data written in a mark-up language**.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Tsukagoshi et al. and Crinon et al. with that of Jung et al. because such a combination would provide the users of an information storage medium on which sub picture data is recorded with a data structure in which when video data are coded, the amount of bits to be generated for sub picture data need not be considered in advance and an apparatus therefor (paragraph block 0031).

10. **Regarding dependent claim 43**, Tsukagoshi et al. and Crinon et al. do not explicitly teach **wherein a time resolution of the text–based data is lower than the time resolution of the video data**.

Jung et al. teach that the time can be expressed in units of (1/1000) second. Also, if video data is MPEG video, the time may have a presentation time stamp (PTS) value of video images on which the subtitle overlays and is displayed. Generally, the PTS value is a count value operating at 27 MHz or 90 kHz (paragraph block 0117), which meet the limitation of **wherein a time resolution of the text–based data is lower than the time resolution of the video data**, since the Specification discloses that the video PRT has a resolution of 90 KHz and the text PRT is in milliseconds (paragraph block 0038).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Tsukagoshi et al. and Crinon et al. with that of Jung et al. because such a combination would provide the users of an information storage medium on which sub picture data is recorded with a data structure in which when video data are coded, the amount of bits to be generated for sub picture data need not be considered in advance and an apparatus therefor (paragraph block 0031).

11. **Regarding dependent claim 44**, Tsukagoshi et al. and Crinon et al. do not explicitly teach **wherein the time resolution of the text–based data is of the order of several milliseconds**.

Jung et al. teach that the time can be expressed in units of 1/1000 second (paragraph block 0117), which meet the limitation of **wherein the time resolution of the text–based data is of the order of several milliseconds**.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Tsukagoshi et al. and Crinon et al. with that of Jung et al. because such a combination would provide the users of an information storage medium on which sub picture data is recorded with a data structure in which when video data are coded, the amount of bits to be generated for sub picture data need not be considered in advance and an apparatus therefor (paragraph block 0031).

12. **Regarding dependent claim 45**, Tsukagoshi et al. and Crinon et al. do not explicitly teach **wherein the text-based data is recorded on the recording medium or provided by an external source through a network**.

Jung et al. teach that when subtitle data and font data that are not stored with video data on the information storage medium are downloaded through networks or loaded on the reproducing apparatus from an additional information storage medium, thus, subtitle data is easily used in other cases (paragraph block 0125), which meet the limitation of **wherein the text-based data is recorded on the recording medium or provided by an external source through a network**.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Tsukagoshi et al. and Crinon et al. with that of Jung et al. because such a combination would provide the users of an information storage medium on which sub picture data is recorded with a data structure in which when video data are coded, the amount of bits to be generated for sub picture data need not be considered in advance and an apparatus therefor (paragraph block 0031).

13. Regarding claims 58 – 60, 62 – 65 and 67 – 69, the claims incorporate substantially similar subject matter as claims 42 – 45, and are rejected along the same rationale.

Response to Arguments

14. Applicant's arguments with respect to claims 39 and 42 – 45 have been considered but are moot in view of the new ground(s) of rejection.

15. In response to the request for an interview, the Office contacted applicant's representative on September 9, 2009, at 3:30 in the afternoon. The Office was informed that applicant's representative would call right back and never did so.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHAN HILLERY whose telephone number is (571)272-4091. The examiner can normally be reached on M - F, 10:30 a.m. - 7:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W Doug Hutton can be reached on (571) 272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nathan Hillery/
Examiner, Art Unit 2176

NH